

Classifying the Creature Kingdom with Nova

Learning objective: To construct and interpret a branching classification key to identify living things based on specific characteristics.

Use this writing frame to design your own classification key. Think about the physical characteristics (observable features) that distinguish one animal from another. Follow the prompts to build your identification guide.

Nova the owl is preparing for a night-time survey and needs to organize her findings into a clear classification key.

Word bank: dichotomous · characteristic · vertebrate · invertebrate · classification · distinguishing · branching · habitat · specifically · whereas · consequently · furthermore

1. Introduction: Describe the group of living things you have chosen to classify and explain why you have selected these specific organisms. Start by saying: 'For my classification key, I have chosen to investigate...' (3 marks)

2. The First Branch: What is the primary characteristic that splits your group into two distinct halves? Explain your reasoning: 'To begin my key, I have used the question... because this separates the group by...' (3 marks)

3. Justifying Choices: Compare two animals from your key. Explain why they are placed on different branches based on their features: 'One might observe that [Animal A] and [Animal B] are different because...' (4 marks)

4. Evaluation: What might happen if you included an animal that did not fit either branch of your first question? Justify your answer: 'If a creature were discovered that did not possess either characteristic, I would need to...' (4 marks)

5. Refinement: How does using a classification key help a scientist like Nova work more efficiently in the field? Explain your answer: 'A classification key is an essential tool for scientists because...' (3 marks)

6. Creative Extension: Imagine a new, undiscovered species. Describe its features and identify exactly where it would fit into your current key: 'The newly discovered creature, known as the [Name], would be classified under...' (3 marks)

Extension challenge: Design a 'dichotomous' flow chart on a separate sheet of paper. Your chart must include at least eight different organisms and ensure that every question results in a 'Yes' or 'No' path that leads to the correct identification.